INTERNATIONAL EDUCATION

Ladies and Gentlemen, may I start by saying what a considerable privilege and honour it is to be here at the Council of Graduate Studies annual meeting here in Washington DC and to able to participate on behalf of Pearson in such a distinguished event. Pearson has been a corporate partner with the Council for the last two years, and this is a relationship we value extremely highly. Perhaps on a personal note could I say how gracious and committed a partner Debra Stewart has been.

If I may today, I would like to devote the next 30 minutes to five areas:

- some broad forces shaping the world of education

- how we should innovate as leaders in education

- the particular challenge presented by digital, what I call internet transformations

- how Pearson is responding; and lastly,

- some questions for the future

Perhaps I might start with a few remarks about Pearson. It can trace its origins back to 1724 in London, when Thomas Longman founded Longman 'at the sign of the ship', the sign of a pub which has become one of our enduring logos. This is the Thomas Longman who published Dr Johnson's Dictionary. Through the years we have had many

manifestations, including in oil and here in the United States in

construction, where for example the engineering firm S Pearson & Son

built the Hudson Tunnel in New York. As recently at the 1990s we

were regarded as a conglomerate, owning a wide range of assets

including Royal Doulton china, a stake in Chateau Latour wine, and

Madame Tussauds. Today, we have become an organisation focussed

entirely on learning, employing 33,000 employees across 70 countries in

three groups – education, Penguin Books and the Financial Times.

We are in fact the largest education business in the world delivering a

broad spectrum of learning – to take three examples only, online

education via eCollege here in the United States, new textbooks to the

government of Zimbabwe as part of that country's reconstruction, and

multimedia English language learning globally via Wall Street Institute.

For those of in education, for those delivering education, and for those

of us in the business of education, there can be little

doubt that this is perhaps – without wanting to overstate the

case – the most exciting time there has ever been in the

world of education. For we stand at a tipping point; on the

edge of an era when the convergence of the desire to learn, with

the transformational power of technology, looks set to deliver

more education to more people in more media than has ever

been possible before.

Make no mistake: we are witnessing a paradigm shift when old

expectations and old boundaries are giving way to new

realities; when the traditional view that education is broadcast

from a teacher **to** a student in a **fixed** environment is slowly –

but with a pace which is increasing in its rapidity, ferocity and

capacity to surprise – is slowly ceding its place to a world where we are

all potential students in a virtual classroom whose sole

defining characteristic is a seamless continuity of content

available wherever and whenever we want it.

We are perhaps all of us familiar with the many forces which

are shaping profound change in the world of education. To

mention but a few highlights:

- a significant growth in the world's population, currently

    standing at about 6.3bn but forecast to rise and plateau at

    about 9bn by 2050

- substantial immediate growth in education participation

    rates in many of the world's rapidly growing economies

    – in China, for example, there will be 5 times as

     many university students graduating in 2020 as there were in 2006

- increasing attention being given to educational

  structures, to assessment and to outcomes by national

  governments, and with good cause. A recent report by

  the OECD called 'The High Cost of Low Educational

  Performance', says that 'A modest goal of all having all

  OECD countries increase their PISA scores by 25 points

  over the next 20 years – which is less than the most

  rapidly improving education system in the OECD,

  Poland, achieved between 2000 and 2006 alone –

  implies an aggregate gain of OECD GDP of 115 trillion

  US$ over the lifetime of the generation born in 2010'.

- the increasing demand for technical and vocational skills

  as more of our industrial and service economies move up

  the value chain

- the extraordinary growth in the use of English as a

  medium for instruction in education as well as in business

  – more dramatically illustrated again in China

  where within 2 years more people will speak English

  than those who speak English in the rest of the world as a

  native language

- significant increases in disposable incomes, especially in

> developing economies, where private family-funded
>
> acquisition of education is driving new entrants into the
>
> provision of education; and, lastly

- the coalescence of the rise of English and

  disposable income driving a surge in the number of

  tertiary students seeking to study outside their home

  countries – where, if we take the number of candidates

  taking English tests for university admission as a proxy

  measure, this number has increased by about 100%

  over five years;

These are challenges indeed, challenges both intimidating in

their scale and immensely exciting in the opportunity they

represent. But before I give some examples of our responses, I would

like to offer some observations on 'innovation' itself, because

it is perhaps all too easy to talk about the 'what' of innovation

rather than the 'how' – and it is my deeply-held conviction

that fostering the spirit of innovation in education is at least as, if

not more, important than considering what it is we should be

innovative about.

As education leaders, our role is to ensure our organisations

are learner-sensitive – that is, sensitive to what learners want

and to the possibilities of innovation.

But how do you engender in any organisation a spirit of innovation which is not so proud and so bound to what it has already achieved that it is deaf to customer feedback? which is prepared to challenge norms and the status quo? and which is restless enough that it can think what may seem the unthinkable?

There are no rules for innovation, by definition. Some organisations (famously 3M) enable so-called 'skunk works' by allowing staff to devote a % of their paid employment to their own ideas. Others attempt to formalise seed-corn investment in innovation through creating ring-fenced innovation or venture capital funds.

To foster innovation, you must take what I call an *innovative stance*. You have to be prepared to be:

- Counter-cultural – ready to reject any suggestion that a specific approach is your organisation's 'way'
- You must be iconoclastic – prepared to challenge any and every accepted norm
- You must be open-minded – receptive to any ideas,

however 'left field'

- You must be pluralistic – open to ideas wherever and whoever they come from

- You must be cannabalistic – unafraid of ideas which threaten existing business

- You must be international – ready to learn from many cultures

- You must be generationalist – anxious to learn from new generations which bring a fresh perspective

- You must be open to new boundaries – unlimited in thinking; and lastly

- You must be humble – aware that many others have the best ideas

In whatever role you take, if you successfully engender innovation in education, you do so not through processes, but through creating an *innovative culture* where ideas themselves are never penalised.

Within a culture of innovation and risk-taking, I approach innovation in education with a very clear set of principles:

- One, **understand learner expectations.** The
  fundamental expectation of many learners will be for
  new or enhanced products delivering more for less cost.
  The challenge is not to assume that price is ever declining but to
  focus on delivering *value* – the right price, not the lowest price.

- Two, **anticipate a rising speed of change**. All education
  customers – whether consumer or corporate – are
  becoming ever more demanding as globalisation and
  technological innovation drive increasing competition.
  No product development approach can be viewed as
  sequential – i.e. one new product or service following
  another. The innovative organisation is already planning
  the next product innovation (*and* the next *and* the next)
  before the current 'new' innovation has even been
  launched!

- Three, **accelerate the speed of development to market.**
  Innovation processes have had to be massively
  accelerated and continue to be so. Elapsed times between
  conceiving and executing product or service innovations
  are ever shortening. Innovation is therefore a fundamentally
  uncomfortable, fast and bumpy ride!

- Four, **know the place of technology**. Technology is not

  the be-all-and-end-all, but it is an enabling prerequisite

  for innovation. It should be seen not just as *part* of new

  products or services, but a key driver of process,

  logistical and supply changes which reduce cost and

  shorten development time.

- Five, **understand core competence**. Being nimble

  demands a clear insight into competence: knowing what

  your organisation does (and should do) well, and what

  should be outsourced. This will change over time, driven

  mainly by the realisation that decisions on what to

  insource are crucial insights about how an organisation

  adds value**.**

- Six, **embrace global skills sourcing**. The best innovation

  junks any notion that home-grown ideas and resources

  are always the best. Globalisation has pluralised and dispersed

  knowledge and skill. Strategies for sourcing any element

  of the innovation should seek the best available suppliers

  based on skill, not on where they are.

At the core of our innovation in education, we must above all else be

aware of the power of what I earlier called 'internet transformations': the

power of the web and associated mobile devices with the capability so

substantially to dismantle the barriers between information and learners,

and so radically to pluralise access to knowledge, that the very 'where'

and 'how' we learn is up for grabs.

For, the static has become dynamic;

what was once broadcast has become interactive;

where communication was once point-to-point it is now mobile;

content once wholly producer-led is now mixed with the user generated;

markets traditionally regulated are often becoming unregulatable;

and the tools of communication once the preserve of producers are now

available to us all.

Bear in mind some key facts:

- the number of years it took for TV to reach an audience of 50m was 38; for Facebook it was 2

- the top 10 jobs advertised in 2010 didn't exist in 2004

- the number of Google searches per month was 31bn in 2009; it was 2.1bn in 2006

- the amount of information created a year now reaches 4×10^{19} bytes, more than in the previous 5,000 years put together

- the number of internet devices was 1,000 in 1984; 1,000,000,000 in 2008

Facts such as these – more than any other factor – will shape the future of

education (and by the way, for those of who you want more data of this kind, I commend the videos called 'Shift Happens' available on YouTube).

In this world of internet transformations, never forget that the world is now divided between *digital natives* and *digital immigrants* - terms coined by Marc Prensky in *Digital Natives, Digital Immigrants* published in 2001.

- *digital natives* – anyone born into the era of mobile digital media (iPods, MP3s), unlikely to be older than 21
- *digital immigrants* – everyone else

Such a bold distinction – insightfully radical to some, wilfully simplistic to others - describes a major cultural, behavioural and attitudinal shift. It depicts a wholescale, generational shift in the way consumers expect to receive and transact information and entertainment. And with it comes a paradigmatic shift in who controls and has access to data, and who understands and uses enabling technologies. Quite simply, you need to know who your digital immigrants are, and who are your digital natives; to be able to shape your response to this paradigm change.

And so for anyone in education their starting point should be what I would call self-innovation: Ask yourself 5 fresh and challenging questions

Who are the competitors and technologies I haven't thought of?

Who are the customers I have never thought of?

How would a 17 year old digital native tackle an issue?

What industry am I in?

What fundamental changes will take place in the next six months?

For anyone thinking, by the way, that these are simplistic or obvious questions, I would refer them to the fate of the music industry. An industry where CD sales are in decline, where globally music downloads are already plateau-ing, and where the major growth is coming from music royalties (for example music used in television) and from live events. According to a recent Economist survey, one British rapper – by the wonderful name Scorcher – recently signed his first record deal, but after that set up a clothing label before he made his first video. He usually wears his own branded products in the music videos he gives away on YouTube. Scorcher, the Economist reports, is not so much selling music as using music to sell, and is reported to have observed: 'If you buy into me musically, you will also buy into clothing and the lifestyle'.

The moral here: be prepared to rethink your business models, not just analyse how to make the current ones better.

And so how has Pearson – as the world's largest education company with

a print heritage dating to 1724 – how has it responded? Well, with what

is a remarkable array of technological innovations and investments:

- Here is Apple boss Steve Jobs showing the new app for the

   Financial Times as he introduced the iPad earlier this year. The

   iPad and other new devices have great potential across Pearson's

   businesses.

- But it's not only the iPad: you can see here the potential for all

   sorts of mobile phones and other devices, which are changing the

   way people consume information and learning

- This slide celebrates Penguin books

   75th birthday this summer. You can see here the Kindle, one of

   many new eReading devices which offer readers additional context

    – including videos and other visual materials.

- Here you can see here a variety of Pearson digital products –

   including enVisionMATH, our digital

   mathematics program in the U.S.; and Fronter, a learning

   management system that originated in Norway but is now

   in 8,000 schools in many countries around the world, serving more

   than 6 million students. The beauty of digital technology in

   such as this is that it allows for personalized learning – with a

   password, students can learn in their own time and at their

own pace, whether at home or school or on the go.

- One initiative from Pearson that really illustrates this is the MyLab software programs, which began a few years ago in the U.S. and are now being used by 6 million students in more than 200 countries around the world. The most popular is MyMathLab, but there are about 40 different versions ranging from MySpanishLab to MyITLab – as you can see in this next slide.

- The way the MyLabs work is that they don't just tell a student whether they have a question right or wrong – but the programmes provide hints so the student can figure out the right approach to solving the problem. So in this way students not only get the correct answer but also the correct concepts.

- Learning should be fun. One area that Pearson is increasingly involved with is gaming in education, already estimated to be a $1.5bn industry. We invested recently in a U.S. company called Tabula Digita, which has developed a mathematics programme known as Dimension M – which is tied into some Pearson products including enVisionMATH. Tabula Digita has staged competitions in many cities in which students compete with classmates or with students in other schools. Gaming now features in about 25 products and services throughout Pearson's businesses, including

Penguin eBooks on Nintendo DS; and something called Criminal
Justice Interactive, an experimental learning environment for
higher education students in criminal justice.

- This is a look at something called ideaSHARE, which allows
teachers and parents to offer their ideas on work plans, lessons and
other aspects. These ideas are being incorporated into Pearson's
middle-grades math curriculum in the U.S. Because Pearson
doesn't believe that we have all the answers ourselves, and
welcomes input from our customers.

- This is a look at a learning management system that we call Project
Tapestry, which combines student information, course
management and other information into a single environment. As
just one example of how this works: Administrators are now able
to quickly identify and measure student performance across
classrooms, across a school district, or across a state or other
geographic region – in order to take action to improve learning
outcomes.

- Here is the Pearson Test of English, a new global English test for
University admissions launched worldwide one year ago. Using
the most advanced Pearson testing technologies, it allows
candidates across more than 40 countries access to book a test up

to 24 hrs before the test is taken; and provides using computer

scoring technologies provides globally-accepted scores only

one day later (where the current competitor standard can be a 2

 month waiting list to take a test and scores which then take up to

three weeks to arrive).

- This is a look at a website called LiveMocha, with which Pearson

  has a partnership to provide English-language instruction.

  LiveMocha is headquartered in Seattle, and it offers web-based

  chat in many languages that link language learners with native

  speakers. But what Pearson now offers through LiveMocha is a

  premium English-language course, the first such premium content

  that LiveMocha has offered. It's more than chat, but is a

  structured course designed to raise English language skills.

- Here is the Poptropica' which is part of Pearson's Family

  Education Network. This is a website where kids log on to create

  their own avatars, and these avatars then explore various islands

  where they learn as they have fun through games. One such island

  is called Time Tangled Island, where the avatars encounter historic

  figures. It's been immensely popular: About 200 million avatars or

  characters have been created, and the site is visited by more than

  10 million kids every month – coming from all over the world. And

  it's of course completely safe: the only information that kids

provide is their age and gender – no email addresses, no phone

number and no live chat.

But our approach to innovation is not limited to new products but extends

to new businesses. In India, Pearson made a couple of investments last

year including a minority stake in a company called TutorVista, which

provides online tutoring throughout the world, mostly to college students

in the U.S. The tutors, many with masters degrees and PhDs, work

from their homes, and link up online with students in their homes –

and these tutoring sessions are organised from TutorVista's

headquarters in Bangalore.

More recently, in 2010, we have bought four educational businesses

- Wall Street Institute, delivering English language training in more than 20 countries
- Melorio, delivering vocational training worldwide
- SEB, a so-called 'sistemas' business in Brazil, delivering complete curriculum, training and resources solutions to schools; and most recently
- CTI, a higher education organisation in South Africa delivering a wide range of courses including degrees to 9000 students

We are investing substantially in research to push the boundaries of our

knowledge further:

- so around the world we have endowed four Pearson professorial

positions (in Oxford, Amsterdam, Perth and Austin) dedicated to

advanced research in education and assessment;

- through our not-for-profit entity the Pearson Foundation we are directly funding academic research, including from 2011 a range of postgraduate scholarships;

- in Arizona at the Pearson Innovation Center we are asking children to help us design products;

- and at the new TechHub in London's rapidly emerging technology district of Shoreditch, we are providing staff with a hotdesk environment in which they can mingle with entrepreneurs.

We have invested in a $10m fund with the US private equity firm Revolution, and one of our earliest investments is in Kenya in a school operation called Bridge which offers families the opportunity to buy private schooling for as little as $3.5 per month.

All of this is about innovating in education: not simply doing things differently, but to be prepared to do different things. So you can see that in our latest transformations from our origins back in 1724 we are embracing both technology and direct involvement in teaching; in innovations where we are working both with partners like the organisations represented here today and also directly with learners.

Which is why Pearson's strap line is now 'always learning' – a statement both that the most successful innovation from within our company will come when we learn and adapt and change; and also that that the world we serve is one where there is ever greater emphasis on the personalised control exercised by the learner. And as Pearson always learns, so it fulfils its goal to provide 'education' in the broadest sense of the word; to aim to help people make progress in their lives through education and information – to help them to 'live and learn'.

At the heart of which is our commitment to the value of content and to the value of structure and pegadogy: both what content you have to live and learn, the way you do it and how you know you've improved.

And where will this all take us next? Well, just last month I was privileged to be the guest of Middlesex University in London. It has 33,000 students worldwide, remarkably more of them outside the UK than in it; with a strong emphasis on teaching in English, but with a London campus (based on my brief encounter) with as culturally and linguistically diverse a group of students you will ever meet. It felt like the world's boundaries had collapsed and that the world was in one place.

And so to me the collapse of boundaries is the next shift in education:

- where more students learn in more places and more countries

- where more data is available in more devices, much of it semantically tagged to location by geo-positioning systems

- where the emergence of gaming and so-called 'augmented reality' will take education into new experiential arenas

- where real-time computer-based scoring will move assessment from being something you do periodically or especially at the end of study, to an inbuilt part of learning

- where examinations will be able to be taken remotely inc at home

- where institutions will become as social as they are educational

This is the world of the seamless and global continuity of content and immediate feedback.

And so to conclude, as we ponder innovation, let us ask a few of the many questions we might pose –

- what will tomorrow's classroom be like? And where will it be? In a building or in a gaming site?

- who will be the teachers? People or avatars or both?

- where will the learning materials be? In the library? The cloud? Or the mobile device? Or all of them?

- Who will be best able to assess performance? The teacher or a

computer algorithm?

The issue is not the questions – or even the answers – but that we must ask them relentlessly and at an ever quicker pace, however much they may challenge and intimidate us.

So Pearson's approach is to embrace innovation in education, but as we deliver more personalised learning via seamless content in a boundary-less world, what aim never to lose sight of is what we are here for: to help people live and learn.

Thank you very much for your time.